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Air Canada Pilots Association

White Paper

Improving the Canadian Civil Aviation Security System

By

Air Canada Pilots Association Security Committee

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Executive Summary

The Air Canada Pilots Association (ACPA) commends the Government of Canada for progress to date on Aviation Security. We propose, however, that additional refinements, enhancements and amendments are now in order.

This paper summarizes the operating environment: the events that had an impact on current policy and on-going concerns, as well as measures taken to date; ACPA's positions on these measures; ACPA's own security plan and how it relates to Government of Canada measures. ACPA proposes new recommendations aimed at maximizing existing capacity, building upon and enhancing expertise already operating in Canada, as well as endeavouring to suggest improvements that will not require huge expenditures. ACPA has, in the course of formulating this paper, assessed some of the weaknesses and limitations of the Canadian Air Transport Security Agency (CATSA). It should be noted that we understand the mandate and concept involved in the creation of this crown corporation. However, as those subject to frequent interactions with CATSA, we believe we are well positioned to observe its strengths and inherent weaknesses. ACPA understands that the federal government is undertaking a review of CATSA and hopes that its comments are received as constructive input into that review process. We have endeavoured to constructively suggest and support an intelligence-focused, 'whole of government' approach to aviation security in Canada.

Background

ACPA has maintained an abiding interest in the reconfiguration of the Canadian Civil Aviation Security System since the attacks of September 11, 2001. This interest, expressed on behalf of the 3,000 airline pilots represented by the Association, has manifested itself in active participation in a variety of federally-mandated initiatives and programs dedicated to strengthening and improving civil aviation security. These have included active membership in Transport Canada Working Groups dedicated to the development and implementation of airport, aircraft and cargo security measures and the provision of expert testimony at national proceedings sponsored by organizations such as the Senate Committee on National Security and Defence and the Commission of Inquiry into the Investigation of the Bombing of Air India Flight 182.

ACPA has been guided throughout these initiatives and proceedings by its own detailed and comprehensive security plans. These plans, developed by the ACPA Security Committee on the heels of the 9/11 attacks, presented an integrated, layered approach to securing the civil aviation network and were instrumental in effecting fundamental changes, including:

- revamping previous “hijack” philosophies (which called for flight crews to acquiesce to hijacker’s demands and facilitate a negotiated settlement) as well as new procedures that emphasize active defence of the cockpit;
- immediate reinforcement of flight deck access points;
- development and implementation of a national “air marshal” capacity.

However, significant portions of the Association’s security plans were not incorporated into those developed by both national and international authorities, and, as a result, in our assessment, many major gaps in the overall aviation security environment remain unresolved and continue to pose substantial risks to civil aviation employees, users and facilities. The truth in this latter statement has been demonstrated, on a regular basis, through the execution of unsettling, “near-miss” attempted terrorist attacks against the worldwide civil aviation network. These include the UK’s “liquid bomb” plot of 2006 and the “Christmas Day bomber” of 2009 (notably an updated remake of the Richard Reid ‘shoe bomber’ case in 2001). Each of these terrorist plots targeted civil aviation on a massive scale and could have had significant ramifications for Canada and Canadians.

Almost ten years after the 9/11 attacks, it is apparent that civil aviation remains a viable and attractive target for terrorist elements and that the industry has narrowly dodged several very large bullets.

Aim

This paper proposes to highlight gaps within the current civil aviation security matrix, relate the ACPA position on these shortfalls and recommend corrective actions.

Discussion

Situating Threat Intent and Capability

Terrorists’ intentions have been established and proven by the execution of coordinated attacks on multiple high-value targets within the United States of America just under ten years ago. These intentions have a strong political component, as witnessed by related declarations issued by Al Qaeda, which often claimed responsibility for these attacks. Canada and Canadians, by virtue of treaty responsibilities and related operations in locales such as Afghanistan, are clearly targets for extremist plots which have yet to be actioned on Canadian soil. Beyond the deaths of Canadian soldiers serving in Afghanistan and civilians killed on September 11, 2001, Canadian interests have yet to be impacted on a large scale.

Terrorist capabilities continue to feature both coordinated and singular tactics combined with a combination of low and high tech weaponry. In the case of massed operations, the 9/11 attacks employed box cutters and pepper spray while the “liquid bomb plot” of 2006 utilized binary explosive technology. The singular events, such as the 2001 “shoe bomber” and 2009 “Christmas Day bomber”, showcased sophisticated bomb technology accompanied by adaptive measures to avoid detection at airport security checkpoints.

As these examples reveal, the terrorist threat maintains a flexible capacity to support variable methods of attack by those willing to give up their lives for the cause. This capacity keeps Canadian civil aviation at serious risk today. Canadian aviation insurance underwriters acknowledge the significant risk by leaving third party liability coverage to federal authorities. This alternative coverage was first issued on the heels of the 9/11 attacks and continues to be reviewed and extended by the Minister of Transport.

The ACPA Security Plan

The security plan was developed on the heels of the 9/11 attacks by the Association’s Security Committee. The Committee determined that an airborne-centric, two-phase approach was required to ensure that in-air security concerns were addressed immediately before tackling an array of longer term objectives. The initial phase of this security plan called for securing the flight deck, cabin and airport environments as first, second and third order priorities, respectively. This portion of the plan called for the immediate reinforcement of cockpit doors and the initiation of an “air marshal” program – both of which were implemented.

The second phase of the plan emphasized the imperative of federal authority and oversight of the entire transportation security matrix. The current devolution of this responsibility to Local Airport Authorities is neither functional nor effective in addressing evolving or emergent threats. We believe it is necessary that one entity be responsible and accountable for civil aviation security and that it must be a federal government department answerable directly to the Canadian public, not a crown corporation.

In the non-airborne, airport environment, the plan called for the implementation of one level of screening for all aviation employees. This measure would require that all those involved with aircraft operation, replenishment and loading undergo comprehensive background screening and be able to validate access to airside facilities with biometric credentials. These sentiments were relayed by ACPA in a letter to the Minister of Transport on September 25, 2003:

“In the area of airport security, American authorities have moved aggressively to vet the backgrounds of all those having access to the secure areas of the nation’s airports. This one measure has resulted in the replacement of hundreds of workers with unsuitable credentials and, undoubtedly, greatly enhanced the security of ramped aircraft. As a member of the Transport Canada Airport Security Working Group, we supported a Group recommendation to institute a similar background check requirement in Canada that has yet to be implemented. This is a grave concern to our Association, as our members question the security status of the aircraft which they take airborne – particularly from high threat airports such as Pearson International.

We believe that Pearson International, representing the fourth largest Port of Entry to the United States – after New York, Los Angeles and Miami – represents a special Canadian case that demands special attention. This fact is borne out by its proximity – both to the American border and sensitive Canadian installations – and is reflected in the enhanced screening procedures that it affords Air Canada flight crews. Given the nature of the current threat, Toronto’s proximity to lucrative targets and the uncertain nature of Pearson’s workforce, it would be prudent to implement the Working Group recommendation regarding background checks. In the interim, it is also critically important to initiate a screening policy at Pearson that scrutinizes all personnel and vehicles proceeding airside. These “side-door” gaps have long been recognized as weak links by blue ribbon panels – such as the Senate Committee for National Security and Defence – and need to be addressed immediately.

While the absence of an incident in the nine years since 9/11 may provide a false sense of security, it also provides those with malevolent intent the comfort that they may not encounter sophisticated or enhanced perimeter security.

A second, longer term objective was the acquisition and installation of an advanced system capable of securing the cockpit environment throughout anticipated airborne operations. (This prime requirement recognized the fact that immediate, interim measures aimed at reinforcing a single flight deck door were incapable of addressing the long-term security segment. This vulnerability was evident in the fall of 2006, when an individual followed a flight attendant into the cockpit of a Turkish Airlines flight.) Additionally, an ACPA Security Committee analysis revealed that, between the 9/11 attacks and the end of 2006, 33 cockpit intrusions were attempted globally, five of which were successful. Further, the majority of the unsuccessful attempts were foiled by effective responses mounted by passengers and cabin crew, not by the existing flight deck security measures.

A fifth recommended airborne initiative was the development of combined aircrew training programs capable of addressing the new terrorist environment. The successful passenger/cabin crew interventions, noted above, underline the benefits inherent in optimizing positive, mutually supportive interactions, through training air crews to understand and employ appropriate psychological and practical methodologies. Aviation training programs have not yet included this aspect in curricula but it is hoped they will in due course.

ACPA supports Behavioural Pattern Recognition (BPR) training for all aircrew and Passenger Sales and Service Agents (PSSA), as the latter are the first point of contact for passengers and the last one prior to boarding. Similarly, across the board training in conflict resolution and negotiation skills could mitigate many problems, preferably prior to boarding.

Reconfiguration of the Canadian Civil Aviation Security System Post 9/11

Whereas ACPA called for an integrated, publicly controlled aviation security system, the post 9/11 reconfiguration featured a markedly different arrangement. National authorities placed responsibility for this critical system in the hands of a newly minted crown corporation – the Canadian Air Transport Security Authority (CATSA).

This structure appears incompatible with the ninth Report of the Standing Committee on Transport and Government Operations. This report was titled *Building a Transportation Security Culture: Aviation as the Starting Point* and was issued in December 2001. It recommended the implementation of an overarching public agency capable of addressing security concerns across the national transportation sector. This authority was to be vested in a Secretary of State for Transport Security, and would have been well-positioned to access national security databases and even formulate related plans in concert with other government security agencies. This would have been compatible with the ACPA view of civil aviation security command and control requirements, as it provided for the introduction of a singular system capable of accommodating disparate ground and air components.

The shortfalls associated with the Crown Corporation approach versus one featuring integrated public oversight, were noted by a former Vice-Chair of the Association's Security Committee in the Fraser Institute paper "Canadian Civil Aviation Security: Improving Command and Control":

The CATSA model is also questionable from a planning perspective. The Crown Corporation is remote from publicly-controlled intelligence, enforcement, and regulatory agencies, which will make planning unnecessarily difficult. Likewise, it is not well positioned to identify threats to system security by virtue of its isolation from these same authorities.

CATSA authorities are cut off from higher-level public security agencies and are similarly cut off from security providers at the operational level. This is because the legislation, Bill C-49, authorizes the delegation of responsibility for ground security operations to Local Airport Authorities (LAAs). These agencies, in turn, are permitted to contract services out to private security providers.

Further, Canada's Integrated Threat Assessment Centre (ITAC) stated in a 2007 report that it assessed "no clear advantage ... to the strategic intelligence community that would accrue from CATSA's participation at this time." This non-recognition of CATSA by federally-mandated intelligence agencies, precludes it from evolving effectively or formulating forward-looking, intelligence-based plans and ensures that it remains a reactive organization and not part of the "intelligence" community. What is required is an appropriately mandated government agency that could have a chair at ITAC, just as Transport Canada, CBSA, CF, CSIS and others enjoy. Similarly, the inefficient and counterproductive procedures associated with security screening of aircrew still require consideration. We believe that these concerns, pertaining to effecting change within the airborne portion of the aviation security matrix, should be addressed in short order.

Changes Underway or Under Consideration

In response to the persistent and evolving threat, national security authorities are contemplating a variety of changes. It is apparent that Transport Canada and CATSA will be occupied with the oversight and implementation of multiple security measures and plans over the next few years. Some of these initiatives, along with related ACPA viewpoints on them, are listed below:

- **The “secondary flight deck barrier” and laser threat issues have been raised by ACPA and are registered as concerns.** The former is on hold as IATA awaits the outcome of a related Radio Technical Commission for Aeronautics (RTCA) Special Committee deliberations while the latter has been recognized as a bona fide safety hazard. *The Association, in the case of the latter concern, has initiated remedial discussions with Nav Canada that have yet to be convened;*
- **A new draft of related Canadian Aviation Security Regulations (CASRs) awaits the release of the Commission Report of the Air India Inquiry.** Changes to the regulatory system will include the requirement for airports and their tenants to produce security plans. Transport Canada is seized with this initiative. *ACPA is monitoring this closely as we are concerned about consistent standards nation-wide and the vulnerabilities which would result if this was not achieved;*
- **Movement of cargo security measures into the legislative framework ACPA supports;**
- **Introduction of technology capable of identifying problematic liquids and gels ACPA supports technology over human detection;**
- **The Critical Restricted Area initiative seeks to raise the level of non-passenger and vehicle screening from present levels to 25 – 40 per cent of total traffic flows through these areas.** These locales encompass the highest risk areas in and around the Air Terminal Building (ATB). This program is seen as more affordable than the RAIC Phase II program which calls for screening of personnel and vehicle traffic at the airport periphery. *ACPA believes that confidence in this approach may be misplaced as resource requirements may outstrip those associated with the RAIC Phase II initiative. Additionally, the consideration of “geo-fencing” or a virtual perimeter that has the added capability of tracking user movement patterns in relation to those that are expected and cleared, when compared to the current RAIC implementation. Such a system will also be capable of the corollary function of restricting access and is strongly endorsed by the pilot community. We would endorse expanding the program throughout the airport employee community, where current screening measures and controls are assessed as inconsistent and sometimes lax for non-passengers;*
- **Fixed Base Operations (FBO) / General Aviation (GA) security upgrades.** Long standing concerns over the lack of screening of aircraft, passengers and personnel at FBOs is now beginning to be addressed by CATSA. It is proposing to procure portable screening units to effect this screening, on a trial basis, at Canada’s eight Class 1 airports. *ACPA believes this initiative will improve the present, non-existent security practices;*
- **Positive Passenger Identification (PPI) / Boarding Pass Security System (BPSS) initiative.** This initiative seeks to prevent the use of duplicate boarding passes to effect fraudulent access to restricted areas. This system would be designed to be consistent with the American equivalent and would be implemented at all designated airports over

the period 2010 and 2011 *ACPA supports and recommends pilots be included in a similar “Secure Crew” program;*

- **Passenger Behaviour System (PBS) initiative is assessed as a solid enterprise that requires careful consideration before implementation.** Currently, it is intended that the program will be designed and operated by CATSA and, given the aforementioned shortfalls of this organization, *ACPA believes this may cause more problems than it resolves.* Airlines, such as El Al, noted for efficiency and security gains in this area, employ robust recruitment programs to secure high quality, officer level candidates before subjecting them to lengthy, highly-calibrated training programs. Candidates must pass the course, not merely be oriented by attending the sessions. *ACPA supports PBS but only with equivalent standards for the Canadian program. Absent the intensive selection and training processes practiced by El Al, ACPA believes the introduction of closed circuit surveillance techniques in conjunction with facial recognition software may prove more effective in detecting criminal intent;* (See Also BPR references in the following section.)

Additional Measures Recommended by ACPA

The Association is sensitive to current budgetary limitations and the need to prioritize requirements and programs to be implemented. For this reason, we emphasize that some of our recommendations can be fulfilled through existing programs and dedicated resources and/or by enhancement to same.

- **ACPA recommends that one entity be responsible for civil aviation security and that it be a federal government department.** Authority and oversight for the entire transportation security matrix must rest with the government, not local airport authorities or crown corporations.
- **All Class 1 airports (Vancouver, Edmonton, Calgary, Winnipeg, Toronto Pearson, Ottawa, Montreal Trudeau and Halifax) have closed circuit television (CCTV) systems which, if programmed, would facilitate facial recognition software (FRS).** It is our understanding that these CCTV systems can be enhanced to strengthen the security network by linking the information they collect with existing law enforcement programs and databases of known threats;
- **Assuming the robust use of FRS in Class 1 airports was implemented, this would naturally complement and bolster a widespread Behavioural Pattern Recognition (BPR) program** (as previously mentioned);
- **ACPA recommends consideration to building upon the RCMP Jetway Program with the provision to enhance same, to meet requirements.** This program, which assists plainclothes police officers in the detection of criminals travelling through airports, has been practicing BPR techniques for almost a decade. It would make both

monetary and practical sense to make use of this, rather than reinventing and/or creating a new body to handle this program;

- **ACPA recommends Transport Canada mandate the training of aircrew, Flight Attendants, Passengers Sales and Service Agents in each of BPR, Conflict Resolution and Negotiation as a means of creating a unified, additional layer of prevention with respect to human malevolence related to aircraft;**
- Recognition of the evidence afforded in several recent government reports (including, Auditor General, RCMP – SPAWN and, CATSA Review) that ground crew access to air terminals remains a preeminent threat. **ACPA supports additional scrutiny at all ingress/egress points at aerodromes and screening of these employees as they enter secure zones.**

Concomitant with the development of an effective system, ACPA believes the civil aviation security system needs to address the following issues:

- advanced flight deck access control systems;
- integrated and relevant air crew training programs;
- effective, appropriate non-passenger screening measures;
- effective policies, procedures and measures capable of mitigating the threat of “laser attack” faced by Canadian flight crews;
- cargo security measures capable of providing flight crews with the confidence required to take subject loads airborne in passenger aircraft; and
- ground screening equipment, procedures and measures capable of assessing ‘intent to do harm’, rather than just the means to do so;
- maximization of existing capacity and expertise in all fields specifically RCMP primacy in BPR in this country.

Summary

The post 9/11 reconfiguration of the Canadian Civil Aviation Security System featured the centralization of related responsibilities within CATSA a ground-oriented, crown corporation removed from federal intelligence agencies. This arrangement precludes any ability for this agency to develop and implement the intelligence-based plans required to stay ahead of an evolving and adaptive threat. More than this, it lacks the span of control capable of embracing the totality of civil aviation operations and aviation security, including those that are affected in the critical airborne environment.

Given these basic organizational deficiencies, the Canadian civil aviation security system as it is now configured, lacks the ability to become seamless. The resulting gaps can provide intelligent,

destructive agents with demonstrated vulnerabilities by which they could breach barriers and potentially-wreak destruction.

This speaks to our fundamental recommendation: A single federal government department be responsible for civil aviation security and that aspects of this cannot rest with civilian authorities or crown corporations. Current command and control arrangements need to be revised to accommodate the development and implementation of intelligence-based plans and to emphasize a “whole of government approach” to intelligence gathering and sharing.